

Summer 1970
Volume 3, Number 3

ROTUNDA

the bulletin of The Royal Ontario Museum



ROTUNDA

the bulletin of The Royal Ontario Museum

Volume 3, Number 3

Summer 1970

Contents

Spotlight with the Editor

Past, present and future at the ROM, page 2

Legends and Accounts of Weagamow Lake

Mary Black, page 4

Crayfish Hunt

David Barr, page 14

The Passing Hours: Decorative to Functional

Jean Bacso, page 22

The Growing Collections, page 33

St. Catherine of Alexandria:

Memorial to Gerard Brett

H. A. Hickl-Szabo, page 36

James L. Baillie: 1904-1970, page 38

Recent Publications, page 39

Membership Information:

The public is invited to join the Royal Ontario Museum and share in its activities. Membership includes subscription to ROTUNDA; invitations to previews of exhibitions and new galleries; free admission to lectures and certain other activities; ten per cent reduction at Sales Desk; advance information on coming events. Annual Membership is \$15, Family Membership \$25, Life Membership \$200. For further information write: Membership Secretary, Royal Ontario Museum, 100 Queen's Park, Toronto 181, Ontario, or telephone 928-3704.

Cover illustration by

*Saul Williams, Weagamow Lake,
Ontario (see page 4)*

Published quarterly by the Royal Ontario Museum,
100 Queen's Park, Toronto 181, Ontario.

Subscription \$3.00 a year. Single copies of current
issue seventy-five cents, back issues \$1.00 each.

Editorial Staff:

P. C. Swann, Managing Editor;

Bruce Easson, Editor;

Beverley Slopen, Associate Editor;

Olive Koyama, Associate Editor;

Ursula Young, Editorial Assistant;

Leighton Warren, Chief Photographer;

Marie Hands, Designer.

Second class mail registration number 1531



Spotlight with the Editor

*Past, present and future
at the ROM*

THE ZACKS COLLECTION

Samuel Jacob Zacks was unique among Canadian businessmen and patrons of the arts. He and his wife assembled one of the most celebrated private art collections in the country. But they not only collected—they gave. Only a few days before Mr. Zacks' recent death, it was announced that they were giving their collections to the Art Gallery of Ontario and to the Royal Ontario Museum. To the ROM will come half the Zacks' huge collection of antique and primitive art—ultimately about 500 items—and a contribution of \$250,000 to the Museum building fund. The collection includes African, Canadian and American Indian, Eskimo, Central and South American, pre-Colombian, Greek and Roman, Egyptian and Persian material.

ARCHITECTURAL STUDY

For many weeks the Toronto architectural firm of Moffatt, Moffatt and Kinoshita has been poking and prying into every nook and cranny of the ROM building. At the same time, the architects have been meeting with the curators and other members of the staff. All the effort is to try to decide space requirements for the ROM in the next 30 years. The architectural study has prompted serious crystal-ball gazing by ROM staff. What will the museum of 2,000 A.D. be like? What will be its role or roles and what will be the function of its staff? This attempt to predict the future is unusual in an institution which traditionally has been the custodian of the past. But since one does not build an addition to a museum every year (the last at the ROM was in 1931), it is imperative that any new structure be suitable for future needs and functions.

CRITICS GALORE

At the invitation of the Canadian government, the International Art Critics Association is holding its 22nd General Meeting in this country August 17-31. It is an itinerant meeting with the critics holding discussions, meeting artists and visiting museums and art galleries in Montreal, Ottawa, Toronto (where they will study collections of the Art Gallery of Ontario and the ROM), Vancouver and Victoria. What these critics write when they return to their home countries may be an eye opener for Canadian cultural institutions and their supporters.

RINDISBACHER COMING

For six weeks, beginning September 18, the Sigmund Samuel Canadiana Gallery will be host to an international exhibition of work by a little known artist of the pioneer West. He was Peter Rindisbacher who was born in Switzerland in 1806 and died at St. Louis, Missouri at the age of 28. Rindisbacher spent seven years of his brief life at the Selkirk Colony on the Red River in what now is Manitoba. There he made drawings of Indian life, including studies of buffalo hunting, and of the settlement. He was living and working in the West several years before more famous artists of the frontier, such as Paul Kane, ever visited the area. After moving with his parents to the United States, Rindisbacher made illustrations

of early American army posts and of frontier life. For this exhibition, Rindisbacher works have been loaned by the Amon Carter Museum, Fort Worth, Texas, the City Art Museum, St. Louis, Missouri, the Glenbow-Alberta Foundation, Calgary, the Public Archives of Canada, Ottawa, and the ROM. Toronto is the last stop for the exhibition which has previously been exhibited in the above cities.

ROM AND THE UNIVERSITIES

Many members of the ROM curatorial staff long have been cross-appointed to the faculty of the University of Toronto. Now the Museum is reaching out to co-operate with universities in other parts of the province. Dr. E. S. Rogers, Curator of Ethnology, will be teaching this fall at McMaster University, Hamilton. Dr. H-Y Shih, Curator, and John Vollmer of the Far Eastern Department will be giving courses at York University. And the ROM has a co-operative archaeological arrangement with Trent University, Peterborough. Dr. Peter Harrison of the Trent faculty has been appointed Field Director of a planned ROM dig in Mexico. In turn, the Museum will select a Field Director for an excavation in Peru. Both Field Directors will teach part of the year at Trent.



Self-portrait by Peter Rindisbacher

Mary Black
Research Associate,
Ethnology Department

Legends and accounts of Weagamow Lake

This year in the remote Indian village of Weagamow Lake, some of the young people are hearing their own grandmother's stories for the first time—on the tape recorder. And their grandmother, who still lives a few doors away, recorded the stories just the other day.

For the last two years I have lived in Weagamow Lake, an isolated Ojibwa settlement in sub-Arctic Ontario near the Manitoba border, about 200 miles north of the CNR line. About 150 adults and 200 children live in the village and I was surprised to discover the young people have not been learning Indian culture from their elders. They have been taught the practical skills of trapping, hunting, and fishing. But I have the impression that parents consider the old ways to be inferior—not quite respectable. This applies particularly to religious beliefs and practices of the non-Christian past—a past that is within living memory of people in their middle years.

Now, however, contact with the south is increasing and Weagamow children are discovering that the world out there, both Indian and non-Indian, has gained an interest in and respect for Indian traditions. The effect of this discovery on the village of Weagamow Lake is interesting to observe.

My own work as ethnologist has provided part of the hardware and one

new channel of communication between the young and the very old. My tape recorder has preserved almost 100 'legends' (*adiso.ka.nan*) and 'accounts' (*ajimo.winan*) by Weagamow storytellers. To obtain translations, I went to the young, for only those under 20 have learned adequate English for the task.

The telling of legends has not died out completely. Some families seem to specialize in storytelling and a few of the teenagers are still hearing the tales from parents or grandparents. My tapes include a few legends passed on by the youngsters, discounting the odd one picked up from a book of Indian legends in the school library. Other teenagers had never heard the stories firsthand until they interpreted for me with old people and some are hearing them only from tape. Perhaps this has always been the case to some extent. There is some evidence that storytelling has long been a sort of specialty.

Pretty 18-year-old Greta Kakekayash interpreted for her 83-year-old grandmother Rebecca, a specialist whose reputation persists. Greta says she likes hearing the Ojibwa-Cree legends though she gulps occasionally at the graphic details and rather gory themes which recur. Here is one of Rebecca's stories, *Sobatap and His Son and His Daughter-in-Law*:

Sobatap killed his daughter-in-law while his son was busy. When his son came back, Sobatap cut the stomach out of his daughter-in-law. She was pregnant. Sobatap's son had two brothers-in-law (*nihta.wisak*). It was their sister who was killed. When they knew that Sobatap had killed their sister, they came to see

him while Sobatap's son went away again.

The brothers-in-law fought Sobatap. They cut his legs off. He went around on his stumps without any legs. The marrow came out of the bones of his legs. One brother-in-law picked it up and put it in the man's mouth, and he sucked it. And the brother-in-law said, "Is that marrow rich?"

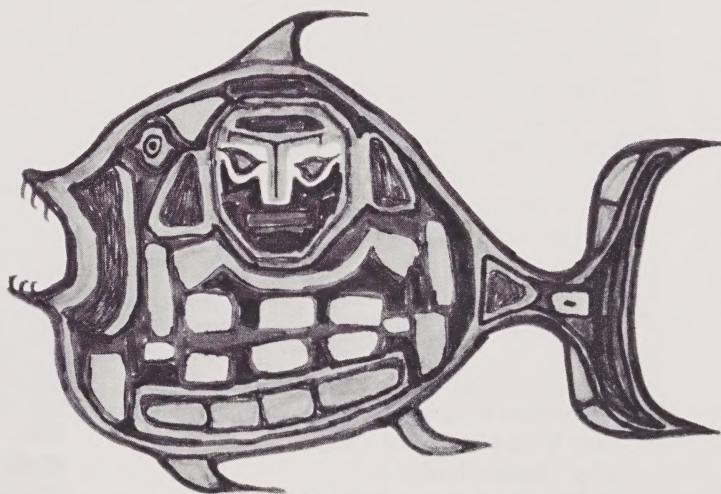
Such themes are not uncommon. Stories of domestic quarrels and violence among humans occur along with tales of talking birds and animals, powerful spirit Thunderbirds, the Windigo cannibal-giant, and the trickster Culture Hero *Wisakezhak*.

Three versions have been obtained at Weagamow of the Algonkian myth about the father who left his son to die on an island. The son is saved by a great horned snake who is afraid only of the 'thunders' or 'Thunderbirds.' In return for his kindness the snake is tricked by the boy and overpowered by his enemy the Thunderbird. When the boy returns home, he joins in some bloody scenes which eliminate his father and his father's second family who have been torturing his mother.

Another story, *Wisakezhak and His Bag of Oil*, accounts for fatty parts on various animals. The following is Rebecca's version, combined with Eliza Sakakeep's story which is more specific about results of the oil.

Wisakezhak killed a bear and ate its head. Then he put all the oil in a bag. Muskrat swam by and Wiza-khezak said, "Sister, hold this bag of oil for me." So he tied it to the end

of Muskrat's tail. Muskrat swam back and forth and then splashed. Wisakezhak said, "Sister, don't do that, you will break my oil bag." Then after a while, Muskrat, swimming back and forth, made a little noise. Then she suddenly splashed so hard that she burst the oil bag. Oil was all over the water. Then Muskrat swam ashore. Wisakezhak caught the rat, squeezed it, then threw it in the woods. Rabbit came and fell into the lake. Wisakezhak caught him and said, "You will spoil those who will live in the future." Along the shore Rabbit just walked, crying and dipping his finger in the oily water and rubbing it over his shoulder blades. That's why rabbits are fat on the shoulders. Muskrat just got oily water on his bottom. That's why muskrats are fat on the bottom and in their underarms. Beaver swam into the oily water. That's why beavers are fat all over. Also Otter fell into the middle of the lake. Only his head was seen. That's why otters have lots of fat.



Illustrations by Saul Williams of Weagamow Lake, photographs by the author

Eliza's story included the squirrel.

The squirrel was running on the rocks crying and saying, "I want to be a bear." That's why squirrels have white eyelids, because once the squirrel was crying.

Saul Williams, a 15-year-old Weagamow boy, heard his mother relate the story of the Thunderbird and the Indian and produced his own English version in a kind of free-verse style.

Thunderbird and Man

Long time ago an Indian
and his friend went fishing
on a frozen lake.

When they turned homeward
after fishing
one Indian walked far behind
with an ice-chisel.

Then suddenly a bird grabbed
him by the shoulders.
The bird carried him higher
and higher.
He held on to the ice-chisel.
Then he saw big, black cliffs,
and hills around him.
The bird, as he knew by now,
was a Thunderbird.
The bird flew towards the
big, black cliffs.

Then the bird swung as if
to smash him against a cliff.
The bird tried and tried.
Then he was ready for the bird to try again.
He put the ice-chisel on his shoulders
and pointed straight
at the chest of the bird.
The bird tried again and got himself
an ice-chisel through the chest.

Quickly the man jumped on the cliffs,
and looked around. Below he saw earth.
Then he saw a nest of small
baby Thunderbirds.
He killed and skinned one of them,
and cleansed it and got inside
the baby Thunderbird and

seamed the opening closed and
rocked himself over the cliff.
Then he found himself back
on earth again.

Saul also has marked artistic talents and has painted murals with Indian motifs on the brown paper walls of my cabin. One painting shows a contest between a snake and a Thunderbird (page 12)—a widespread theme of Ojibwa religion and mythology. The Thunderbird design of the Ojibwa, which is similar to the better-known mythical bird of the West Coast, has been found on ceremonial drums and sacred articles of the Ojibwa *Midewiwin* religious order. Saul learned in school about the Northwest Coast artistic motifs in masks and wood carvings. This may have influenced his paintings for it is not entirely clear upon entering my

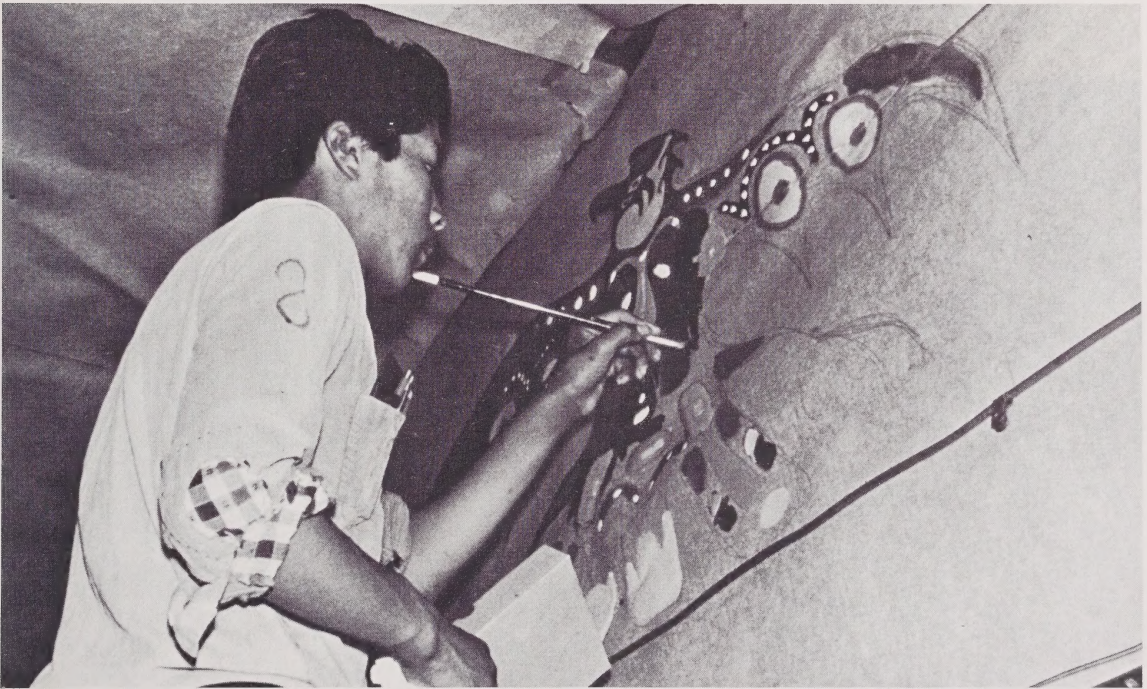


cabin what part of Canada one might be in! But that is the way it is today in Weagamow. Since government education began in 1953, children know a great deal about the world outside which they have never seen.

In addition to the decorative aspect, I also use Saul's wall painting of a stylized eagle as a device in my attempt to assess how much of the traditional belief remains and how it affects people's behaviour. I ask all visitors to my cabin what name they would give the painting. In Weagamow the word for thunder is *pinesi*. In Minnesota *pinesi* means both thunder and Thunderbird. However, many Weagamow people claim to know no other meaning but thunder for this word. Others in the community immediately give *pinesi* for the painting. The distinction does not even fall along generational lines with older persons more likely to know

traditional ways, words and beliefs. Those who have named the painting *pinesi* include a nine-year-old boy who first gave the English "Thunderbird" and then pronounced the Ojibwa word on request.

The stories I have discussed so far are the *adiso.ka.nan*: legends and myths of events that were supposed to have happened long ago, and have been recounted again and again through the generations. Many of the Weagamow tales are found among widespread groups of Algonkian Indians from Labrador to northwestern Minnesota. I have heard some of the Minnesota tales myself. Dr. Rémi Savard of the University of Montreal has collected a number of legends from the Montagnais-Naskapi of northern Quebec and Labrador. They were edited by Peter Desbarats and published in 1969 by McClelland and Stewart in a volume entitled, *What They*



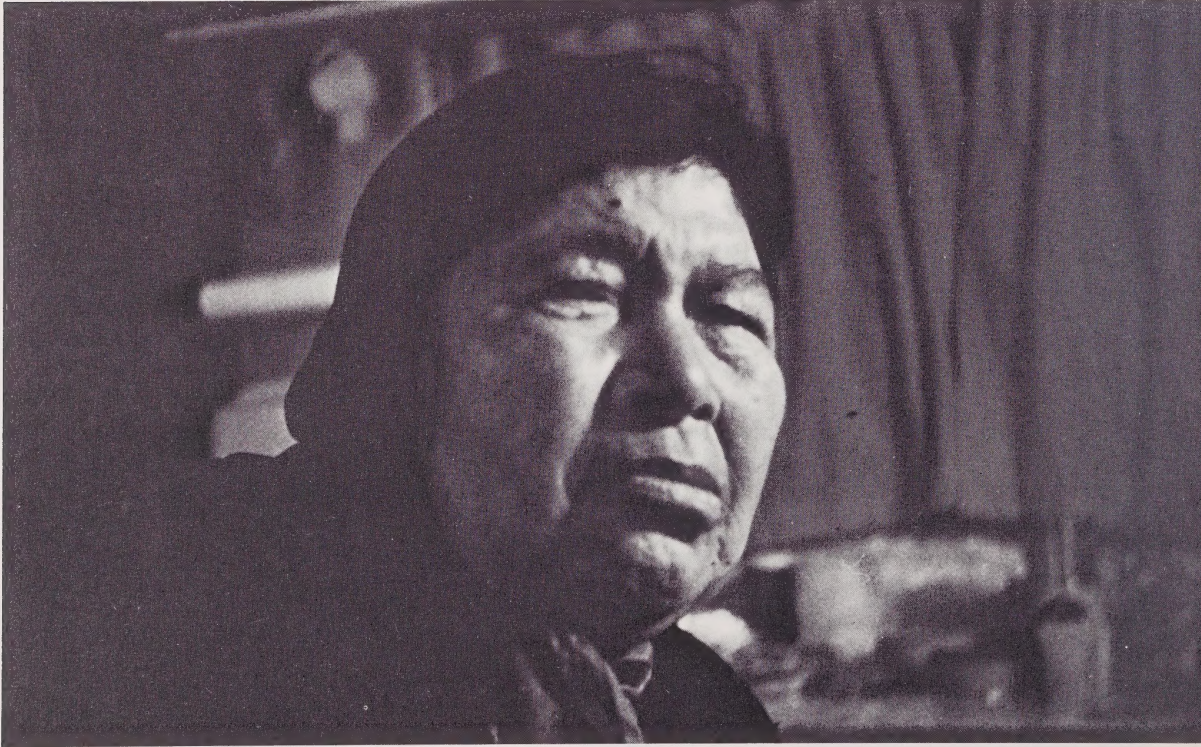
Saul Williams painting stylized eagle

Interior of Mary Black's cabin



Saul Williams, Weagamow Lake

Eliza Ombash, Weagamow Lake



Used to Tell About: Indian Legends from Labrador. Mr. C. E. Fiero has taped and translated stories from Pekangikum, Ontario which have been published by Northern Lights Gospel Mission as *The Moons of Winter and Other Stories* by Norman Quill. When the young people of Weagamow pick up the volumes in my cabin, they become quite engrossed.

The other type of story I have recorded is called *ajimo.win* which is an account of something the storyteller himself recalls. It may be recent "news" or happenings remembered from time past. When one storyteller was asked if his tale was *adiso.ka.n* or *ajimo.win*, he replied, "I saw it happen." Most of my *ajimo.winan* are childhood recollections from older people which recall harsh conditions when livelihood and health were precarious and suffering and death the all-too-frequent outcome. The storytellers rarely fail to add a note about the relatively easy life today for themselves and their children. When they were young, the harshness of real life must have matched the legends, in essence if not in detail. Fear of possible witchcraft powers (frequently the explanation of disasters and misfortunes) probably did nothing to soften the situation.

A woman, now about 55 and considered "old," recalls her difficult childhood.

I was very poor when I was a child. I had only a mother . . . Later, when I had no parents, I made my own living. I got used to doing things for myself and I did everything alone. They treated us badly when we had no parents . . . I always went out to sleep alone, camping in the woods, trying to feed myself. All by myself, I didn't go with anyone. I trapped lots of muskrats. People treated me better because I had brought something home. I never had much to eat. I brought rabbit, also muskrat, also ducks I caught in the trap. When I brought my furs in, people grabbed them. I couldn't sell them . . . When I killed something, they would take it.

When my mother was alive, they didn't pay any attention to us. They just took care of themselves. People would move to another



place and leave us behind . . . The people would go out moose hunting. They wouldn't feed us when they killed a moose; we fed ourselves . . . And we would go hungry . . . Then my mother would go out after food and I would be alone when I was young. She would bring lots of fish and that's how we ate. We did that when all the Indians had moved away . . . When the people returned, they wouldn't feed us much, just a little bit. When it was spring, we would catch a few rabbits again.

A man with similar childhood circumstances tells of the rewards of working hard.

When I was growing up, I had no parents and I became very poor. My father took care of me when my mother died. When my father died I was laid down inside the tent. I stayed in the cradle and nobody would take me. Then my sister looked after me because she knew I had no parents. When my sister got married, my aunt raised me. I was still in my cradle. When my aunt took care of

me, I had a very poor life. I had a rabbitskin jacket. I didn't even have any pants—only a rabbitskin jacket. When I started working, I did things for myself . . . I sometimes think about the past—how my life was very hard, and how I nearly starved . . . I did all the work that I could do. I used to kill lots of moose when I was still young and hunting. I used to get lots of furs when I was still trapping. I got used to going hunting and trapping alone. I stayed away as long as I wanted to and I never had any loneliness . . . Now I am not well and cannot do any work. I only think about liking to work. I was happy while working when I was young. I was very happy . . . The person who raised me made me work on any kind of job . . . That's how she taught me . . . and I was always eager. She knew what I had to do to get along—that's why she taught me. When I was that young, I was happy. And now my young son should be like that—he should like working—the way I worked hard when I was young.

A man, also in his fifties, describes life and customs when he was young.

Old people long ago were very poor. They wore rabbit-skin clothes to keep them warm while fishing. They made a hole in the ice and used a hook to get fish. There was nothing else to eat. In the morning when they got fish, they ate it. In the evening they did the same thing. People had a hard time to get food for themselves.

I went with my dad trapping. We trapped lots of furs . . . My dad had lots of children. There were about 10 of us in the family. From the furs, we had enough money for groceries and clothing. My dad worked very hard to keep us alive.

Once my dad and I and someone else went hunting. The first night the other man cut his leg very badly. Then later he could hardly walk. We were in one place over 20 days; the man couldn't walk any more. I stayed with the man, while my dad went hunting

and trapping. I snared rabbits, and there was no flour, only a few matches. The man with the cut leg walked a little. It was near Christmas. We had to get back home. (Caribou Lake to Weagamow is 30-40 miles.) We had to walk day and night with the man, because if we stopped he wouldn't be able to walk again. The man barely made it. We came home to our tent. There were no houses at that time.

Long ago when people went hunting they made a wigwam to sleep and live in while trapping. In summer they trapped otter with wooden traps before they had the traps we have now. My dad made snares for bears too and killed them, and I saw him do it. Old people long ago worked very hard in order to live. These things happened when I was a child. I saw them.

Eliza Ombash, who is about 60 years old, tells a story that she heard long ago.



Wall painting of Indian head by Saul Williams



I'm going to tell a story about a woman and a birchbark canoe. She had a poor living and always lived alone. She went to the store one summer in Cat Lake, and sold the gum that she took from trees. That's the only way she made her living. When she travelled she used a birchbark canoe. When she came to a portage, she carried her canoe, but when the portages were too long, she removed the sticks from the canoe and she carried only the birchbark, and then she came back to get the sticks. Then she put the sticks back on the canoe again. She reached the store and got some matches from the gum she sold. That's how poor and hard people's life was long ago. She lived all alone and never asked people to help her. It took her almost all summer to get to the store because sometimes she fixed her canoe and put new sticks in. That's all I know about this lady.

The first "artificial" or secondhand exposure



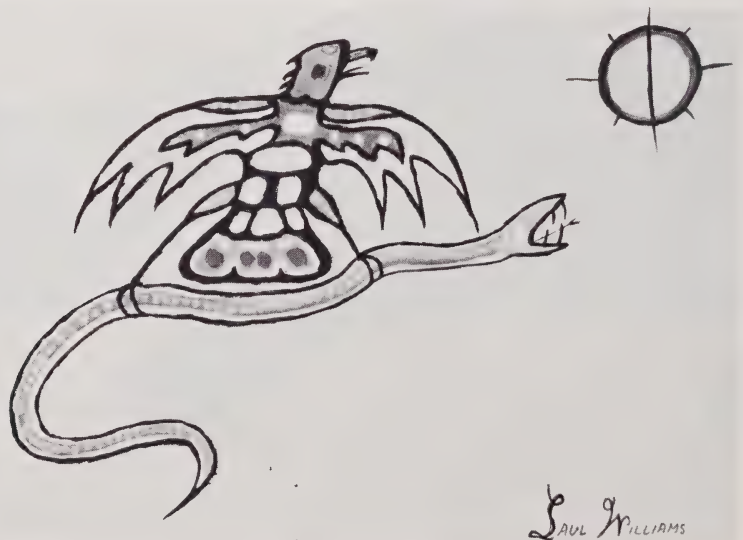
in Weagamow to Indian tales is not always through me. One or two indigenous efforts at preserving local heritage have emerged. A man in his 40's who recently purchased a good tape recorder has recorded stories from old Rebecca and is playing them for his family and others. They include Rebecca's own descendants and one wonders if these children now will start going directly to her for 'live' entertainment. There is scant entertainment at Weagamow Lake, live or canned. No purely recreational films, music, dancing, games or parties have found a place to happen, although in some cases the school and churches provide 'educational' versions. All the more reason one would expect to find home gatherings and fun and especially a persistence of the old storytelling on a winter's evening.

My evidence that most children and many young adults *do not know* the stories indicates that these occasions have become infrequent. I am aware of my inability always to distinguish *lack of knowledge* from *withholding knowledge*, and am certain the latter has occurred. In fact, I think a degree of psychological denial which goes deeper than mere suppression is also present. However, withholdings of either type weigh on the side of cultural abandonment.

In the world of 1970 the picture at Weagamow Lake may be changing again toward greater knowledge of the Indian past—due in part to increased contact with the modern world. For now youngsters learn English and read their own grandmother's stories in books published in Ontario, Quebec and Minnesota. They also see the graphic art of other Indians expressing a tradition. Knowledge of such world currents no longer stops at the frontiers of the wilderness. Weagamow Lake, remote and isolated until now by its geographical position, is inevitably to become part of the modern world in today's rush to 'develop' the northern regions of Canada.

I pray that its people will be sufficiently prepared by a strength learned from the harshness of the not-so-distant Indian past as well as by an education to our worldly ways to prevent the impact from being totally destructive to the individuals I have grown to know and love during my two years in their village.

Illustrations by Saul Williams; stories printed in part were translated from Ojibwa by Greta Kakekayash, Janosa Quequish, David Ogema-wene, Saul Williams, and Gary Quequish, all of Weagamow Lake.



*Snake overpowered by
Thunderbird*

Greta listens intently to legends told by her grandmother, Rebecca Kakekayash



This summer Mary Black completes her two-year ethnological study of the northern Ojibwa community of Round Lake—now called Weagamow. No doubt she will miss the people in this village of board houses clustered around three churches, a school and two stores. The teenagers, who helped her greatly, were fond of visiting for long chats, browsing at her books and magazines and having cocoa and cookies. Last Christmas she took three boys, including Saul Williams, to visit her sister's family in California. Dr. Black, who received her Ph.D. from Stanford University in 1967, has worked with Ojibwa in northern Minnesota. She is a Research Associate in the ROM's Ethnology Department.



Crayfish hunt

David Barr

Assistant Curator,
Department of Entomology
and Invertebrate Zoology

In the summer of 1963, the most extensive crayfish hunt in Canadian history was launched by ROM's Department of Entomology and Invertebrate Zoology. Our search for Ontario's largest freshwater invertebrate led us through the ponds and streams of southern Ontario. We stood knee-deep in muddy water, under leaden northern skies, turning over sharp-edged stones with numbed fingers. We were startled awake at 5.00 a.m. by the nerve-shattering bellow of the Long Point fog horn, not 300 yards from our cabin. We sank slowly into the primeval ooze of a freshwater swamp with one arm

*Portrait of a patriarch (large male
of *Cambarus robustus*)*







*Dr. Denton W. Crocker
collecting Orconectes virilis
in a northern Ontario lake*

plunged down a crayfish burrow, grasping at the spiny, snapping creature buried two feet below the surface. But the remarkable feeling each time we discovered the colours, the shapes and the textures of an unfamiliar crayfish, made every minute of this "crayfish hunt" an adventure.

In addition to chronicling our damp odyssey, the story of this project illustrates a major contribution by a large, natural history museum such as the ROM. Recognizing a gap in biological knowledge, and progress in filling that gap, holds considerable significance for the whole community.

The majority of biology text-books treat the crayfish as one kind of animal, much the same

wherever you find it. We knew from the start of the project that this was an over-simplification. But as we became more familiar with the different types of crayfishes found in Ontario, we could only marvel at the variety of different animals confused under the name crayfish, and at the diversity of their ways of life. Each species is unique and distinct, and once you begin to know them, each is as easily recognized as one of your own human acquaintances.

There are some basic things common to all crayfishes. These animals have no backbone, nor any internal bony skeleton at all. Instead, the body is given form, supported, and protected from damage by a hard, jointed, plate-armour, strengthened by layers of crystalline

calcium carbonate (limestone). "The armour suit" is fitted with numerous implements and devices to adapt each crayfish to its underwater habitat; spines, claws, bristles and sensitive tufts of hair together with a full set of 18 pairs of movable appendages make possible all of the normal life functions—eating, self-protection and reproduction.

All of our species are more or less tied to a watery way of life, but within the limits of this restriction, their habits can be infinitely varied. None are merely scavengers as some text-books maintain; most appear to feed on all kinds of plants and animals, both living and dead. Young crayfish, in turn, form an important element of the diet of many freshwater fishes, making them a particularly attractive bait in certain kinds of sport fishing, especially fishing for bass. Humans also find certain crayfishes useful as an educational tool. Many tens of thousands are dissected annually in biology classes. In addition, some species may be valuable in detecting extreme levels of pollution, because they apparently are eliminated from their natural home only when the deterioration of the water has become most severe.

Were there, in fact, large populations of crayfishes in Ontario? Were they widespread or restricted in distribution? How many species were there and what kinds of aquatic habitats did they utilize? We had to don our hip-waders

and go out into the streams and lakes, or we would never know the answers.

There was a little concrete evidence to go on. Shortly after the turn of the century, Professor A. G. Huntsman had done a survey of Ontario crayfishes and reached some important conclusions based on the limited data which were then available. His collections and a smattering of subsequently acquired specimens were present in the Entomology Department. A fairly good number of the states to the south of Ontario had been studied, and publications describing the crayfishes found there were available. By 1963, it had just become possible to bring together the personnel needed to carry out a full-scale investigation. Dr. Denton W. Crocker, a freshwater biologist, who had already done a thorough study of the crayfishes of New York State, had recently gone over most of the ROM collections and made notes. Also, a fledgling student assistant programme had been initiated in the Department and I was on staff as a full-time student worker during the summer months. This encouraging series of facts led Dr. Glenn B. Wiggins, Curator in charge of the Department, to organize a five-year research programme, "The Crayfishes of Ontario."

To study crayfishes, we had to have collections. The Department of Entomology and Invertebrate Zoology mounted one extended field trip to northwestern Ontario and numerous



Several of the 18 pairs of movable appendages are visible in a field examination

*Our first view of a living specimen of crayfish, *Orconectes rusticus* introduced into Ontario from the U.S.*

smaller collecting expeditions to most southern areas in the Province. Almost all of this work was supported by a research grant from the Canadian National Sportsmen's Show. In response to our plea for Ontario crayfishes, Dr. C. H. D. Clark, Chief of the Fish and Wildlife Branch, Ontario Department of Lands and Forests, asked his staff to send in any crayfishes encountered in the course of their work. These conservation officers and foresters are located in every corner of the Province, and their help provided invaluable coverage for the 412,582 square mile area.

We also had the help of many amateur naturalists and professional biologists. Some of these people collected crayfishes during the course of other aquatic surveys they were making, some reported the location of crayfish colonies, and still others turned over various kinds of field observations. A number of collections and a good deal of interesting information were

obtained from bait dealers in the Lake of the Woods area. In addition, important help was given by the staff of the Museum library, for we had to find all publications, some of them over 100 years old, dealing with the biology and distribution of North American crayfishes.

It didn't take long to get an idea of the variety of crayfishes found in the Province, what areas each inhabits, and what type of habitat each prefers. For instance, three native Ontario species (*Orconectes virilis*, *O. propinquus*, and *Cambarus robustus*) live almost exclusively in larger rivers and streams in the southern portion of the Province, but in northern Ontario they also colonize the rocky margins of deep cold lakes of the Precambrian Shield. These three are our most widespread and common crayfishes. One species (*C. bartoni*) is a creature of fast, cold streams in the south, but also switches to lakes and deep rivers on the Shield.

A different ecological group of crayfishes we



Copulating crayfish in centre

found only in the southern areas of the Province. All are species which habitually or occasionally burrow into the ground. Perhaps they are restricted to areas where the Precambrian Shield does not severely limit the depth of soil available for the construction of their tunnels. One of these (*Orconectes immunis*) is the common species of farm ponds and sluggish streams in southern Ontario. *O. immunis* burrows only if its pond dries up under the hot sun of late summer, and then the burrow follows the receding water table straight down so the crayfish can avoid fatal drying. The other two crayfishes (*Cambarus fodiens*, *C. diogenes*) are regular burrowers in waterlogged ground, and we could usually spot their colonies by the presence of groups of clay-mud chimneys, one over the top of each burrow entrance. Where the soil is rich in clay, each chimney is an elegant structure, composed of rounded balls of clay, brought up to the surface during excavation of the burrow. In sandier soils the chimney is more shapeless, sometimes only a formless heap of mud above the burrow entrance. The underground portions of the burrows often have several entrances, a resting chamber and a deep, vertical retreat tunnel. One of these burrowing crayfishes (*C. diogenes*) is Ontario's rarest species, existing at only a few localities along the north shore of Lake Erie. If the planned industrialization of this shoreline is completed, it is almost certain that one more delightful element of our fauna will be lost forever.

A totally unexpected discovery was the presence in Ontario of two rather unusual species of crayfishes (*Orconectes obscurus* and *O. rusticus*). The first collections of both of these species were made by conservation officers of the Department of Lands and Forests. When they were identified at the ROM and their significance realized, planned collecting trips turned up the animals in several additional localities.

Neither of these unexpected crayfishes had been found by Huntsman 50 years ago, nor were specimens of either present in the collections of the ROM or of the National Museum of Canada. The populations we found occur

only here and there, usually in widely separated lakes, in areas where fishing is an important element of the tourist business. And the only places that they are known to inhabit naturally are hundreds of miles away in Ohio, Illinois and the mid-western United States. The answer to this seeming paradox became unmistakable during a trip to collect *Orconectes obscurus* in a southern Ontario lake. The lake was surrounded by vacationers and by vacation cottages. And outside almost every cottage stood a car with an Ohio licence plate. Evidently the crayfishes are purchased as bait in the U.S. and carried here to be used. When the holiday or the fishing trip is over, the bait is released into the lake and begins happily to set up housekeeping in its new home. These introduced species sometimes do very well here and appear to be displacing populations of our native species in some areas.

Dr. Crocker and I found convincing evidence



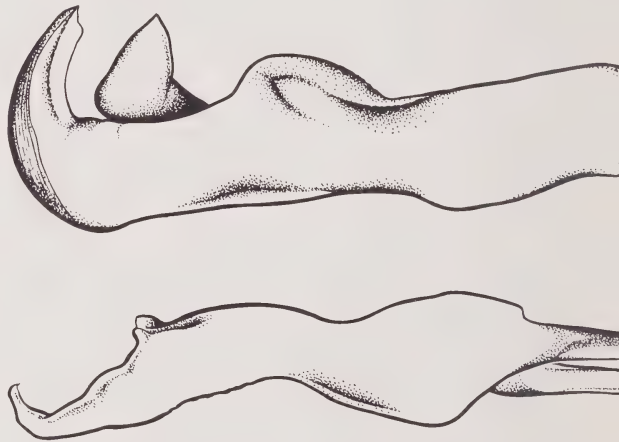
Animal artifact—the elegant chimney of a burrowing crayfish

of the spread of one of these introduced crayfishes in the Lake of the Woods. We were trying to obtain more specimens from a population of *Orconectes rusticus* in the Reed Narrows, about 40 miles south of Kenora along Hwy. 71. A collection from this locality by Conservation Officer R. B. Hall had first alerted us to the presence of unusual species in Ontario waters. Fortunately, as it turned out, our vehicle broke down in nearby Sioux Narrows, and as we had to wait several days for the arrival of a new part, we had a marvellous opportunity to look a little more closely at the introduced population. With a motor boat rented at a motel-fishing camp in Sioux Narrows, we toured the shores of the Reed Narrows, and of Long Bay, stopping to collect at several points on either side. The worst was confirmed. The introduced species, *Orconectes rusticus* occurred at several widely separated intervals along either bank and no sign of the native species, *O. virilis*, could be found in this area. However, on both sides of the *O. rusticus* zone, *O. virilis* was found again in plenty. Apparently the two species cannot live together in this habitat, and as the introduced crayfish slowly expands its territory, the native crayfish is pushed out.

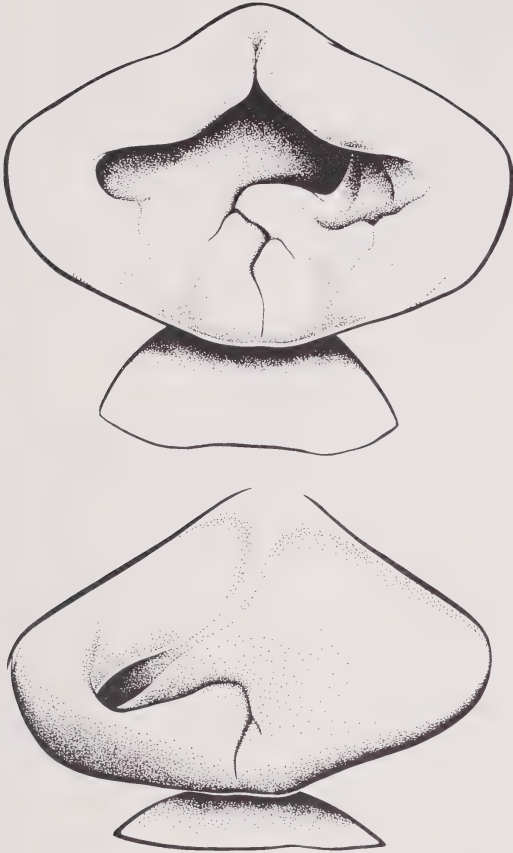
The most concrete result of our labours was a new and we now think complete list of the species of crayfishes occurring in Ontario. Eventually nine species were discovered in the Province, seven of them legitimate "native sons" and two apparently recent introductions from the United States. The next task, with material of each species on hand, was the construction of a reliable identification key. A key is a kind of programmed set of instructions that one can follow in order to identify an animal or plant. It is a guide to selected significant features of the organism, and eliminates the need to compare each specimen with a full description of the species. With this complete, any biologist in the Province can quickly discover which of the nine species of crayfishes he is studying. Illustrations of the identifying features of each crayfish were prepared by the departmental artist and have added greatly to the usefulness of the finished key.

In the later stages of this research it dawned

The shape of the copulatory stylets is distinct for each species. Actually modified legs, they are used by the male in sperm transfer
The female's seminal receptacle is a storage area for deposited sperm.



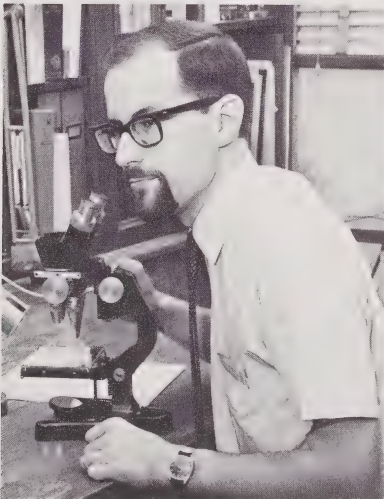
on us that in spite of an extensive reference to the earlier literature, we had found no general account of all the details of crayfish biology; no one source in which a student or research worker could find a quick survey of the information about crayfishes that might be useful in his own work. Thus, our final obligation in recording the story of Ontario crayfishes was to compile a summary of the biology of all of the species found in eastern North America. This account ranges from the description of the body and appendages to the details of mating behaviour, egg-laying, feeding and growth. Of equal importance are sections dealing with the relationship of crayfishes to many of the other animals sharing its environment, including man. The Canadian National Sportmen's Show once again came to our aid, assisting with publication of the final report.¹



All in all, our “crayfish hunt” proved to be a most rewarding experience. We had not only succeeded in obtaining a reliable picture of crayfish distribution for one of the largest political subdivisions in North America, but in general the results obtained are applicable to all of eastern Canada and to much of the prairie region as well. Now, in-depth studies of additional aspects of crayfish biology can be confidently based on a firm understanding of our fauna.

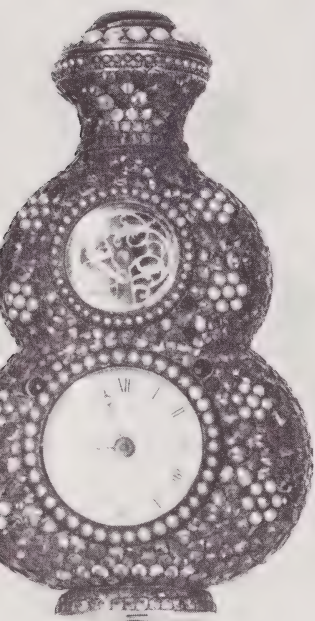
Studies of this kind are needed for many other groups of freshwater animals, studies which can provide a “state-of-the-environment” report for the mid-1900s. The existence of this information will be the only yardstick by which we can chart the course of the continuing disturbance of our environment. Perhaps only through such comparisons of past with present, and present with future, can we visualize the accelerating rate at which the natural world is being altered, debased and eliminated. And our hope for an eventual solution can lie only in this painful awareness.

¹Crocker, D. W. and D. W. Barr, 1968. Handbook of the crayfishes of Ontario. Life Sci. Misc. Publ., Royal Ontario Museum, Toronto: Univ. Toronto Press.



Although David Barr officially joined the ROM in 1968, he has been associated with the Museum since 1962 when he was an undergraduate working as a student assistant in the Department of Entomology and Invertebrate Zoology. He joined the department as Curatorial Assistant and in 1969, after receiving his Ph.D. from Cornell University, was made Assistant Curator. At 27, he is one of the youngest among the curatorial staff. His research on crayfish led to an interest in water mites which now absorbs his time. His avocation—closely connected with his vocation—is popular writing on the natural history of creatures without backbones which comprise three-quarters of the animal kingdom. David Barr is married and has a daughter one year old.

(above) English watch made for
export to Turkey, late 18th
century
(L) 19th century English watch
movement mounted in a Chinese
snuff bottle form.
Gift of J. Sutcliffe Smith
(R) 19th century Swiss watch
movement set into a Chinese
belt buckle.
Gift of J. Sutcliffe Smith



The passing hours: Decorative to functional

Jean Bacso

Assistant Curator, European Department

Look at your watch. Chances are, you are aware only of the time it indicates, not of the watch itself.

Today's timepiece is a highly complex and accurate instrument. Primarily it is functional and then perhaps decorative. Its only jewels may be hidden inside the case. Its relatively small size, both in depth and diameter, make it efficient and practical.



*English watch, mid-17th century.
The engraved gilt brass dial plate has only one hand.
Gift of J. Sutcliffe Smith*

Rock crystal case (also on page 23) with the hinged movement tipped out, showing the backplate engraved with the maker's signature, Ambrose Bliss

(At right) Silver dial plate of a late 17th century watch. Gift of J. Sutcliffe Smith



But tracing the development of watches from the 16th century is like charting the ascendance of the functional over the decorative. Watches of the past combined the separate artistic talents of the goldsmith, enameller and jeweller with the technical expertise of the watchmaker.

The earliest portable timepieces, which we call watches, date from the early 16th century. They had typical drum-shaped gilt brass cases and a coiled spring to store power as opposed to the weight-driven power of clocks. By the early 1600s, watchmaking was well established in Germany, France, Switzerland and England. A great diversity of forms evolved: fantastic cases of gold, silver and rock crystal in the shape of skulls, crosses, books and flowers. Worn on a chain around the neck, these precious and curious watches were mostly

pieces of jewellery. Their time-keeping was not very accurate because until the invention of the balance spring about 1675 watches had only one hand, the hour hand.

Most of the watches in the Royal Ontario Museum collection were generously donated by Mr. J. Sutcliffe Smith, in 1928. A watchmaker in St. Catharines, Ontario, he travelled widely to assemble a collection illustrating the fascinating history of watches from the 17th to the 19th centuries. Over the years, this collection has been occasionally supplemented by the ROM through purchases or gifts, but we have yet to acquire a watch from the important period before the mid-17th century.

The earliest watch in the Museum collection was made in England in the mid-17th century (page 23). It has a deep octagonal rock crystal

*Gold watch made in the early 18th century
by Daniel Delander, London. The pair case is covered with tortoiseshell*



case, like many watches of this period, set in a gilt brass frame or bezel. The floral engraved dial-plate of gilt brass has the hour circle engraved with Roman numerals which show traces of having been blackened. The back of this watch is as interesting as the front. The movement, hinged to the case frame, tips out to show the backplate signed by the maker, Ambrose Bliss. Visible above his signature is the delicately pierced and engraved oval watch cock or bracket, which supports the upper end of the balance staff and also protects the balance wheel. Pierced brass pillars separate the front and backplates which house the movement. This watch utilizes the verge, the earliest form of escapement, the mechanism connecting the motive power and the regulator, and transmitting the energy of the mainspring to the

balance wheel. The verge escapement was standard until the second half of the 18th century when improved escapements such as the cylinder, lever and duplex supplanted it.

Enamel painted cases, made by melting coloured glasses on to metal, were popular during the mid 17th century. A famous centre at Blois in France made and exported such cases all over Europe. From this period on, the circular watch became general, and with the introduction of the balance spring, watches became for a time thicker and larger in diameter. For more than 100 years from the late 17th century many watches were provided with a second and sometimes a third outer case known as pair cases. The inner plain metal case was hinged with the movement and the loose outer case was often ornamented with repoussé work or enamel. This

case in turn had sometimes a protective case covered with tortoiseshell or shagreen.

A plain silver pair case verge watch made by Johan Widman, a German who worked in Sweden in the late 17th century, has a large silver dial plate with a black enamelled hour circle and a minute circle outside it.

Slightly later is an English pair case verge watch by Daniel Delander (page 25). The plain inner case is gold, the outer case is covered with tortoiseshell fixed by brass pins. Much more elaborate in decoration is the gold pair case of another English watch by Clarke and Dunster of London (below). This watch has a repeating mechanism. When the stem was pushed in, the hours and usually the quarters

were struck, a very practical consideration for learning what time it was at night. The repeating mechanism, an English invention of the late 17th century, was in use until the early part of the 19th century. Here both cases are finely pierced around the edge with scrolls and birds to enable the striking to be heard. The back of the outer gold case has repoussé ornament showing Pomona and the Seasons within symmetrical scrolls. Such mythological scenes, probably copied from design books, were popular motifs for repoussé work. The dial plate of this watch is white enamel with an arched hour circle which is found on 18th century Dutch watches and some English watches made for the Dutch market.

During the latter part of the 18th century enamelled cases, which had not been popular for a hundred years, returned to favour in France, Switzerland and England. The watch by James Howden of Edinburgh (page 27) shows a finely enamelled scene in delicate colours of the Sacrifice of Isaac. The bezel of this watch is decorated with relief flowers of tinted gold. The Swiss verge watch (page 27) with a silver-gilt case has a rather stridently coloured enamel back showing a Bacchante. Green paste jewels are set around the bezel and pendant.

Europe also made watches specifically for export to Turkey and China. English watches of the late 18th century made for the Turkish market use Turkish numerals on the dial plate. The example (page 22) by George Prior, a well known maker for the Turkish market, has a silver pair case hallmarked London, 1785.

Since the early 17th century the Chinese have greatly admired the colourful and mechanically ingenious Western clocks and watches. This has not been due to any special regard by the Chinese for measured time. By European or Western standards, the Chinese may be said to have disregarded time. Their enthusiasm for the timepiece amounted to an almost childlike delight in a gadget, in a mechanism that ticked and the rightful owner thought the repentant although a rather expensive one.

The special correspondent of the London *Times* in China in 1857-1858 wrote in one of his dispatches: "The highest ambition of a



*Gold pair case repeater watch
by Clarke & Dunster, London, early 18th century.
Gift of J. Sutcliffe Smith*



*Early 19th century watchcases decorated with painted enamels.
(L) James Howden & Co. Edinburgh; (R) Swiss, unsigned. Gifts of J. Sutcliffe Smith*

Chinaman is to have an English watch. A pirate who took a missionary and set him free, risked his life next day by calling on him at his house. He produced the reverend gentleman's watch, and the rightful owner thought the repentant man had come to return it. Not so; the dandy Cantonese pirate had come to beg the missionary to teach him how to wind up that watch."

Apart from resident aliens and the wealthy aristocrats of Peking there were few who could afford such trinkets. Nevertheless 18th and 19th century Peking gradually became a market for the clocks and watches of England, France and Switzerland. Some of the western watch movements were mounted in novel cases made in China. A snuff bottle (page 22) of double gourd shape encrusted with pearls and coloured paste jewels has a movement signed Berthon, London. The movement has been adapted to allow the pierced watch cock to show through one aperture and the dial plate through the other. A 19th century Swiss movement is

mounted in a Chinese gilt bronze belt buckle with *champlevé* enamel decoration, pearls and coloured paste jewels (page 22, lower right).

A special type of watch was made in England and Switzerland for export to China in the early 19th century. Often made in pairs with bright enamelled backs and pearl-set bezels, these watches had a duplex movement lavishly engraved with scrolls and flowers. Two Chinese market examples are illustrated (below). The lower one has a gold case with London hallmarks for 1818. Pearls on the bezel accent the back enamelled with a woman and child admiring a butterfly. The translucent blue enamel background reveals engine-turned decoration on the gold case underneath. A similar watch, the gold case hallmarked London 1821, has the back enamelled with a nymph and cupid (below, upper right). Another enamelled watch of this period (below, upper left), not made specifically for the Chinese market, has a cylinder escapement signed by Berrud

Watchcases of about 1820 decorated with painted enamels, the upper right by Samuel & Sons, London and the lower by Richardson, London with duplex escapements made for the Chinese market.
Gifts of J. Sutcliffe Smith

Watch and chatelaine ornamented with blue enamel and pearls. Signed Barraud, London, late 18th century. (Page 29, below)
Bequest of Miss Anne M. Sterns

(Page 29, above) Swiss automaton watches. (L) C. J. & A. Perrenoud & Co., Locle, late 19th century. (R) Bordier, Geneva, early 19th century.
Gifts of J. Sutcliffe Smith





and Son, London. The quality of the enamelling is quite fine; the rays of sunset in the apricot coloured sky are suggested by radiating panels of engine-turning on the case back which show through the translucent enamel.

A late 18th century blue enamelled gold watch, signed Barraud, London, has pearls set into the bezel. The chatelaine, to which it could be attached, is similarly adorned with pearls. It has a hook for slipping into the lady's waistband, and also carries the watch key, a seal and decorative tassels.

Ingenious novelty watches were made in France and Switzerland in the late 18th and early 19th century with automaton mechanisms of varying complexity, some incorporating musical mechanisms. The figures in classical costume on the dial plate (above, right), raise their arms and strike the bell at the hours and the quarters. On the left is a later example, also Swiss, with blacksmith figures striking the anvil when the watch repeats.

Although Switzerland received an influx of French craftsmen in the late 17th century, it did not assume its position as the world's leading watchmaking country until the second half of the 19th century. By then it had replaced England, which had been the centre of many inventions and improvements during the 18th century.

A mid 19th century gold cased watch made in Switzerland for a London dealer has glass-covered dial plates on both sides (page 30, above, left). On one side are seven small dials showing the time in London, Paris, Calcutta, St. Petersburg, San Francisco, Chicago and Washington. The other side has a calendar arrangement in small dials which can be reset by the five pins on the case band. On the right is a German verge watch of the early 19th century made by J. J. Baerr of Francfort. The white enamel dial plate has a quatrefoil arrangement calendar. The four hands (one missing) point to the centre of the dial plate. When the stem is pushed in and held, these hands point respectively to the hour, minute, day of the week, and month.

An elaborately decorated French watch case of the first quarter of the 19th century has an

engine-turned dial plate with tinted flowers on the bezel. The back simulates a shell with gold beaded rosettes and topazes on the ribs (below, left). Extremely small movements became possible with the cylinder escapement; the Swiss watch (below, right) is only $\frac{1}{4}$ " thick, while a typical 18th century verge watch is $2\frac{1}{2}$ " in depth. The engine-turned gold case of this "tactile" watch has 12 protruding studs around the edge; a flat gold hand on the back cover, when turned, stops and indicates the hour at one of the studs. On the front cover is the engraved monogram of Count Battyanyi who fought in the 1849 Hungarian Kossuth Revolution. An ordinary white enamel dial plate lies under the hinged front cover.

Another Swiss watch of unusual shape and ornament is shown on page 31, left. Dating from the end of the 19th century the silver case has niello floral decoration on the back showing Art Nouveau influence. The white enamel dial plate of this fan-shaped "sector" watch has



(L) Swiss watch showing calendar arrangement on the dial plate, mid-19th century.

(R) Verge watch by J. J. Baerr, Francfort, c. 1800. Gifts of J. Sutcliffe Smith

(L) French watch decorated with gold rosettes and topazes. First quarter, 19th century. Gift of J. Sutcliffe Smith. (R) Gold "tactile" watch, Swiss, by Bautte & Co., Geneva, c. 1825. Gift of Miss Hazel Morris in memory of Dr. Endre Aranyossy



numerals arranged in an arc; when the hands reach 12 they fly back to zero.

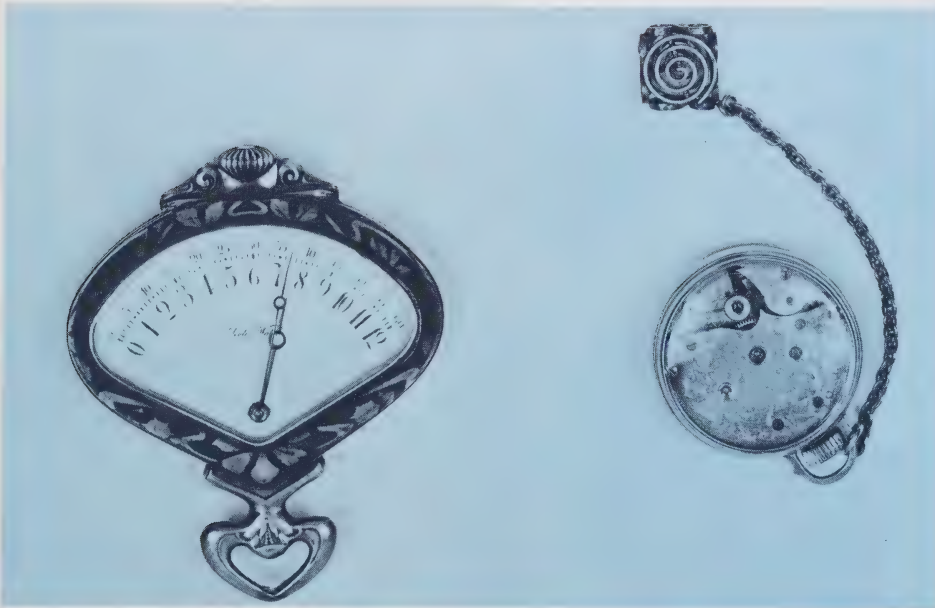
J. Sutcliffe Smith himself made a curious watch (shown at the right, below) using a Waltham stem wind movement. The dial and back plates are made from two 1917 Canadian fifty-cent pieces. The dial plate shows King George V's head with an hour circle cut around the edge of the coin; the gold hands of this watch incorporate the initials JSS of the maker and donor.

An illustrious name in watchmaking is that of Abraham-Louis Breguet, a Swiss who worked most of his life in France during the late 18th and early 19th century. A maker of great inventiveness and precision he created the tourbillon watch with an escapement designed to avoid positional error. He popularized a practical self-winding watch and the "tactile" watch. And after centuries of elaborately decorated watches Breguet made fashionable the extremely plain flat watch with a white enamel dial plate and a gold or silver back ornamented only by engine-turning. From the unobtrusive

simplicity of the Breguet style (page 32, left), modern watchmaking has taken its inspiration.

Backplates from watches illustrate the evolution of watch cocks from the early 18th century to the early 19th century. The making of watch cocks, which protect the balance wheel, was done by workers who made only these specialized parts for watches. Watch cocks show certain stylistic changes and their evolution also reflects a changing emphasis in the decoration used on the parts of the watch generally unseen except when open for winding. By the early 19th century the more utilitarian spirit gradually eliminated the decorative piercing and engraving of the backplate, just at it came to prefer the restrained simplicity of Breguet type watches.

Until recently, there had been few technical improvements in watchmaking during the past century. The wristwatch, though known as early as the 16th century, was not produced in quantity until early in the 20th century; its



(L) "Sector" watch, Record Watch Co., Swiss, late 19th century. Gift of J. Sutcliffe Smith
(R) Watch made by J. Sutcliffe Smith, showing the backplate made from a 1917 Canadian fifty-cent piece cut to accommodate screws and jewellery. Gift of J. Sutcliffe Smith

Below, left. Repeating watch signed by Breguet et Fils, French, first half 19th century. Gift of J. Sutcliffe Smith

A) John Perry, London, early 18th century. The round cock is pierced with symmetrical scrolls and an engraved mask.

B) John May, London, c. 1740. A cap or bridge with a slit over the balance wheel which has weights attached to the arms gives the impression of a pendulum motion. Dutch watches of the first half of the 18th century often used this arrangement.

C) Edward Arnold, London, third quarter of the 18th century. The cock with richly pierced scrollwork shows Rococo influence.

D) J. Donbrog, London, late 18th century. A neo-classic urn and pierced scrollwork decorate the cock. The scroll-pierced foot which follows the outline of the plate is smaller than in earlier examples.

E) Thomas Perrin, London, early 19th century. The cock and foot, no longer pierced, shows the final phase of decoration, cursory engraving of the solid surfaces.

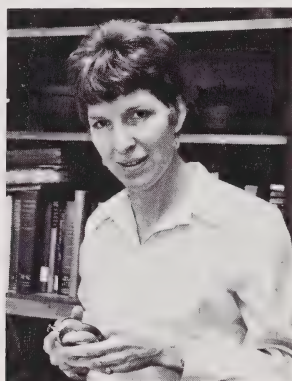
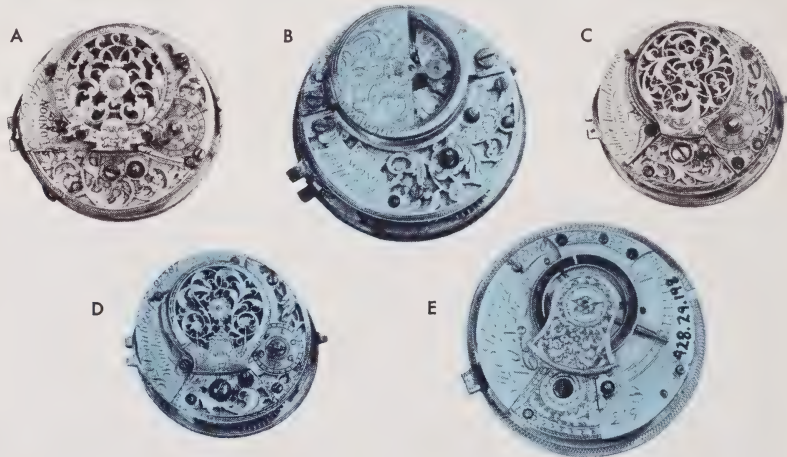
A) to D) are the gifts of Mr. Evan Roberts;

E) of J. Sutcliffe Smith

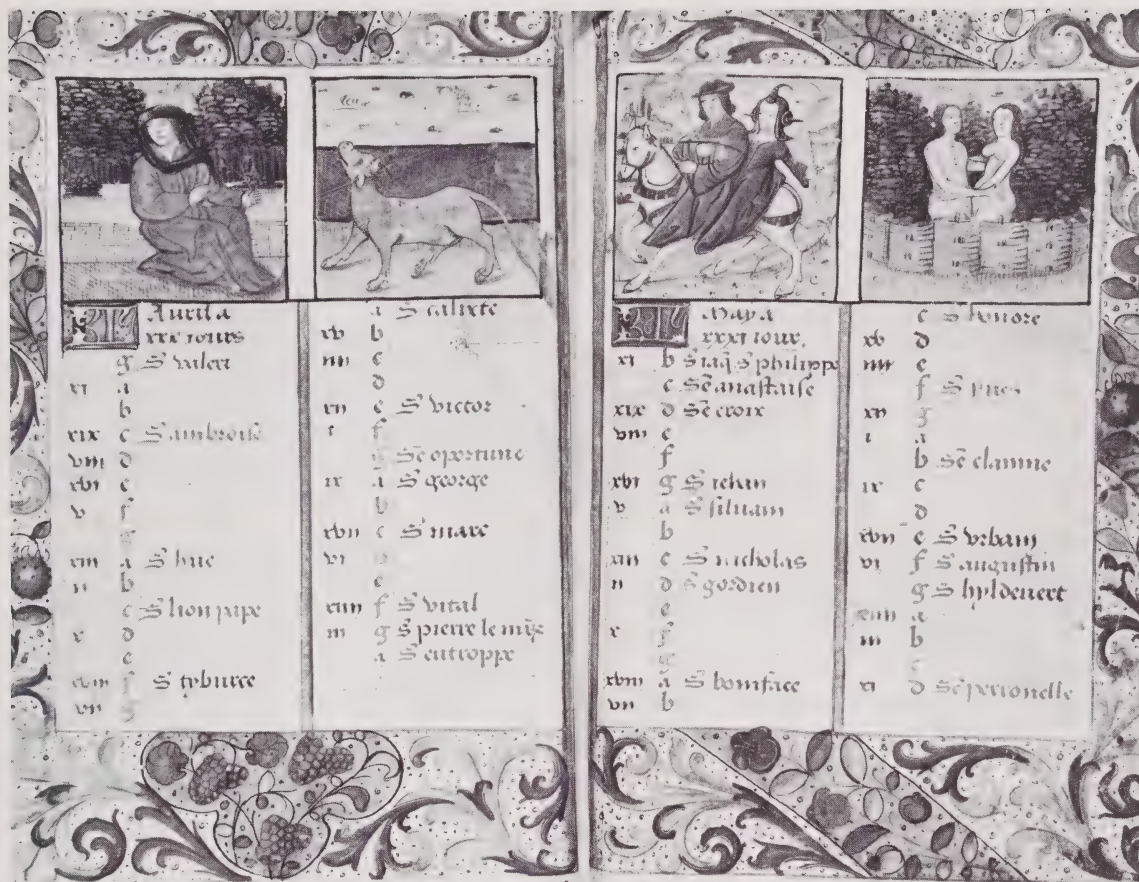
practicality during the First World War assured its subsequent popularity.

Impressive developments during the last decade have been the electric watch and the Accutron watch. The former replaces the mainspring with a tiny long-lasting battery. In the latter the mainspring as well as the balance wheel are replaced by an inch-long tuning fork kept vibrating by a battery.

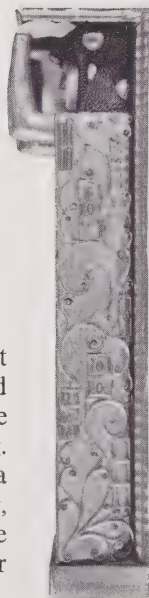
With technical excellence and large scale production at its height, it is conceivable that decorative watches may return to favour. Increasingly we see watches set in extravagant bracelets with beautiful stones, or worn as pendants or pins, again taking on the aspect of jewellery which they first displayed more than 300 years ago.



After graduating as a Registered Nurse, Jean (Ferguson) Bacso went on to receive her B.A. in Fine Arts in 1962. She worked for two years in India as a CUSO volunteer and joined the ROM's European Department in 1965. She helped organize the major exhibition "Prized Possessions from Private Homes" in 1968, wrote a guide to the Museum's collection of arms and armour and is currently working on the English collections of glass, porcelain and furniture. Mrs. Bacso works full-time as Assistant Curator and part-time toward her M.A. degree.



Another purchase is an art nouveau sideboard and cupboard of black oak, formerly in the possession of Mr. Allan Feig. Two pilasters, each a caryatid in a stylized robe, worked in ivory, mother-of-pearl, alabaster, marble and gilt gesso, support an upper portion of the sideboard.

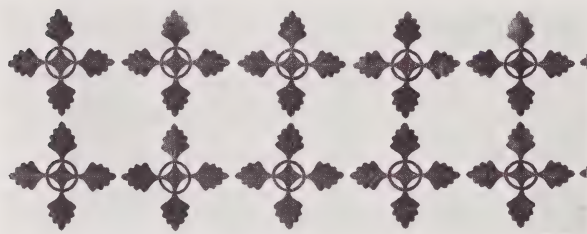


The Growing Collections

Both through purchase and gift, the European Department has recently received many important accessions. One impressive addition to the collections is a 15th century illuminated manuscript from France which was given to the ROM by Mr. Robert Laidlaw. The illustration shows the calendar pages for April and May, with saints' days indicated in red and blue. A detailed publication of the manuscript is intended in the near future.

Purchased from the proceeds of last year's delightful Baroque Ball are two pieces of an 18th century leather wall covering, probably Belgian. They will be installed in a second continental period room in the European Galleries.

The Textiles Department has recently received two important gifts. The first, a generous donation from Mrs. John David Eaton, made possible the purchase of a group of textiles made in Quebec in the 19th century. The acquisition includes some of the finest pieces known to have survived. Shown here is an appliqué quilt made by Marie-Esther-Anne Raymond in 1840 when she was 17 years old. Some of the quilts will be on exhibition in the Textile Gallery this summer; others will have an important place in the special exhibition of Canadian Textiles



The Quebec *os-de-mouton* armchair in butternut, Louis XIV influence, dated c. 1680-1730, is upholstered in early 20th century Quebec crewel-work. It is the gift of the Laidlaw Foundation to the Canadiana Department.

planned for September, 1971. The second gift, from Mrs. Edgar J. Stone, was a collection of costume and textiles made in Spain from the 16th to the 18th centuries. With Mrs. Stone's previous gifts of material from the same country, we now have a representative collection both of folk art and of the silk weaving for which Spain was so justly famous. A special display of this material is planned for later this year. By purchase, two groups of 20th century fabrics have been acquired. One of these is work of the Edinburgh Weavers during the 1960s; the other is documented silks woven by the firm of Tassinari et Chatel of Lyon, which was founded in 1762. The examples range in date from 1909 to 1965, and include "The Four Elements" specially woven for the Paris Exposition of 1925 and a length showing the Ile de la Cité of Paris, specially woven as curtains for the Hôtel de Ville in that city in 1965.



Among the gifts to the European Department are an English 17th century lantern clock, the bequest of Mrs. Nellie Brown Campbell, a pair of French silver candlesticks (Paris, 1722) and an ecuelle (Douai, 1740), the gift of Mr. Harold Crang, and, through the Ontario Heritage Foundation, a Queen Anne two-handled silver covered cup (London, 1703, by Richard Syngin) from Mr. Hart Massey in memory of Lionel Massey, and an oil painting by Saftleven II, from Mr. R. B. F. Barr, Q.C.



Other purchases include a beautiful 17th century glass mirror frame of rare quality, a figurine, possibly representing God the Father, of about 1700, from Nevers and a soft paste porcelain bust of d'Oultremont, Prince Bishop of Liège, which was made in Tournai during the second half of the 18th century. There is also a porcelain figure of Christ, in Meissen ware, from about 1735. With the figures of St. John and the Virgin acquired a year or so ago, the galleries may now show a Crucifixion scene in porcelain. All these figures were made either by Kaendler or Kirchner.

The Department of Mineralogy has acquired four species not previously represented in the collections: athabascaite, michenerite, paracostibite and talnakhite. Other important additions include a large crystal of molybdenite (26 x 24 x 1 cms.) from Quebec; a fine diamond crystal about 4 x 4 x 3 mm. from South Africa; two excellent betafite crystals from Ontario, one of them on calcite; and a magnificent group of pyrrhotite crystals (5 x 4 x 2.5 cms.) from Trepca, Yugoslavia.

In all, 222 specimens have been added to the collections. In addition, through the courtesy of the Central Canadian Federation of Mineralogical Societies, numerous specimens of reference quality have been donated by amateur mineralogists.

St. Catherine of Alexandria: Memorial to Gerard Brett

H. A. Hickl-Szabó
Curator, European Department

The criteria for the European Department's selection of a worthy memorial for the late Gerard Brett were several. To honour Mr. Brett, who served as the second and last Director of the Royal Ontario Museum of Archaeology and later Curator of the European Department, we wanted a major work of art rather than an example of porcelain, silver or furniture. It should be English if it were to be in the mainstream of his interest. And it should fill a definite gap in the galleries so well arranged by him.

On all these counts an English mediaeval sculpture fully qualified as a suitable tribute, but for financial reasons it appeared at first highly unlikely that our choice would materialize. Had it not been for the generous contributions of his colleagues and friends it never would have.

The object finally selected is an alabaster figure of St. Catherine of Alexandria. It is 33 inches high and is tentatively identified as mid 15th century from a workshop in Nottingham. It is the duty and privilege of the European Department to thank all those who contributed to the success of the project and who are mentioned on the label that accompanies the statue in Gallery 10.

Such works are quite rare. During the Reformation, England lost almost all her wealth of mediaeval art. Edward VI's Act of January 1550 against "superstitious books and images" specifically lists alabaster images. The destruction or defacing of religious works of art was carried out with fervour similar to that of the Roundheads a century later. If it is possible to



*St. Catherine of Alexandria.
Alabaster figure made in England about 1450*

see alabaster images in public or private collections, it is due to the fact that large numbers of these carvings originally were made for export, and that others were transported to France during the reign of Edward VI.

Almost all such carvings were made for altars. They were in relief and less than 17 inches high, interesting perhaps more from the aspect of iconography than as a display of fine craftsmanship. There are, however, a few exceptions of superb quality and of larger size. Two of them in the Nottingham Castle Museum, a Virgin and Child and a St. Peter with Kneeling Donor, are believed to have been made for domestic use. That they survived the wave of vandalism is a miracle. Others of large size are very scarce, and could probably be counted on the fingers of both hands. From our point of view the most important is a St. Catherine about three feet high in the National Museum of Ancient Art in Lisbon (inventory #144). It is mentioned in connection with one of the few objects datable by documentary evidence (to 1456) in an article by W. L. Hildburg, F.S.A., "A Datable English Alabaster Altar-piece at Santiago de Compostela" (*The Antiquaries' Journal*, vol. vi, 1926, p. 307).

The survival of our figure, coupled with the fact that it came to light in France before reaching the London art market, suggests a continental patron, possibly in France or Spain, but so far, unfortunately, that is all that can be said about her earlier history.

Technically speaking our statue, as usual with English alabaster carvings, stands half way between a relief and a sculpture in the round. St. Catherine wears her mantle drawn across in front and tucked under the right arm, which allows the rich garment to fall in several V-shaped folds. The carving is delightfully bold and the drapery crisp. Her stance is proud and self-assured, and she holds in her left hand a very large sword and in her right a very small edition of a torture wheel. Due to the complete loss of polychrome the face, while beautifully carved, is devoid of expression. The type of crown, the treatment of hair and drapery, and the pose all declare an English mid-15th century carving. The left hand and what remains of the sword hilt, pommel and crossbar show a puzzling inconsistency, and are a later replacement. But what leaps to the eye is the definitely non-English fashion of her clothes, culminating

in what appears to be a stylized version of a surcoat over the chest. It is this detail that makes the Lisbon St. Catherine so important to us, as the same detail, while not identical, is visible on this statue, which also shows a non-English fashion. While it is tempting to explain the existence of such a detail as a misinterpretation on the part of the anonymous craftsman, who perhaps worked from a graphic prototype, it is an arrangement which frequently occurs in continental art or in art made for the continent. It can be seen on a French sculpture of about 1450, a stone figure of St. Anne from Metz or Strasbourg now in the Philadelphia Museum of Art.

One further point needs to be mentioned, and that is the term "Nottingham alabaster." It has been loosely applied to all English alabasters, regardless of the fact that there were two other centres of this kind of sculpture, at Chellaston in Derbyshire and in London.

The tentative synopsis of our identification is "Alabaster figure of St. Catherine of Alexandria, 33 inches high. English, about 1450, probably ordered by a continental patron."

English alabaster figure of St. Catherine in the National Museum of Ancient Art in Lisbon



James L. Baillie: 1904-1970

by T. M. Shortt

James L. Baillie, Assistant Curator of Ornithology, who was a member of the ROM staff for 48 years, died May 29, 1970 at the age of 65, one month before he was to retire. The following tribute is by his longtime friend and associate, Terence Shortt, Chief of the Museum Display Biology Department.

If I were permitted but one word to depict Jim Baillie, I think I would choose "generosity." He was generous with his knowledge, his time and his possessions.

Jim loved kids. I remember him telling me that at age 12, his interest in birds already aroused, he went to the ROM to see the bird gallery. He was hurt when, because he was underage, the doorman refused him admission. Years later as a ROM staffer there was a flash of grim Scottish determination in his voice as he told me: "No kid with an interest in nature will ever be turned away from my door."

None ever was. Those "kids," stimulated, enthused and inspired, became our leading conservationists, zoologists and botanists. Many became professionals in universities, museums and governments from Victoria to Halifax. But many more, their lives enriched, pursued nature study as an avocation.

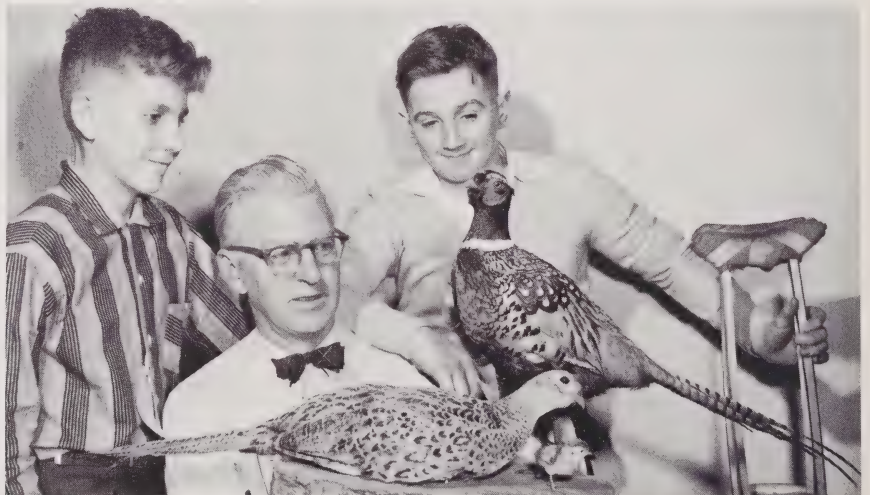
If I may have a second word for Jim it would be "integrity." The standards of accuracy in bird sightings soared immeasurably during his field activity of 50 years. For anything unusual it was "get the specimen" and if that was not possible or desirable "get a photographic documentation of it." If he rejected it, it became suspect to all, even the observer himself!

In 1965 Jim conducted a successful financial campaign to buy for the ROM a Great Auk and a Labrador Duck, the only two extinct Canadian species not previously represented in the Museum collection. One contribution was accompanied by a note which read: "This is some small measure of thanks to you, Jim, for introducing me to a lifetime of enjoyment."

Jim Baillie was one of only four honorary members of the 37-year-old Federation of Ontario Naturalists. He was awarded the Ontario Conservation Trophy, was voted an elective member of the American Ornithologists' Union in 1935 and received many other citations and awards.

He was a prolific writer. I know of 306 papers, and no doubt there are many more, on birds, botany, conservation, history and biography in scores of books and journals. His

*Jim Baillie and friends.
Courtesy
Toronto Telegram*



weekly column in the Toronto *Telegram* ran longer than any nature column in the Canadian press—more than 2000 entries.

His notebooks, faithfully and meticulously kept, date from March 28, 1920 and record the 50-year history of events in Ontario ornithology and of the province's ornithologists.

In 1967, when Canada celebrated the 100th anniversary of Confederation, a Centennial Medal was conferred on Jim. It carried the citation, "In recognition of valuable service to the nation." Perhaps the letter written by Dr. Walter M. Tovell, Chairman of the Canadian

Audubon Society, puts the citation in perspective.

"... A special committee unanimously nominated you ... for the medal ... because of the leadership you have shown throughout a lifetime devoted to inspiring interest in the study and enjoyment of birds in particular and natural science in general. Through your patience and understanding, you have been directly responsible for guiding many of today's leading naturalists and conservationists in their formative years."

Jim will never be replaced or duplicated.

Recent Publications

What happens when Hurricane Hattie destroys an archaeologist's notes? When, furthermore, failing health prevents their reconstruction? With the death of A. H. Anderson in 1967, British Honduras (Belize) lost its first Archaeological Commissioner, and many of his projects seemed destined never to be reported. A considerable body of artifacts and data, however, remained—most importantly the 1959 collection from Rio Frio Cave E. From diaries, fragmentary notes and plans, and personal study of the artifacts, aided by observations during a trip to the site with Dr. Anderson in 1961, David M. Pendergast, Associate Curator in the Office of the Chief Archaeologist, has prepared a report on the finds at Rio Frio Cave E. (A. H. ANDERSON'S EXCAVATIONS AT RIO FRIO CAVE E, BRITISH HONDURAS (BELIZE), ROM Art and Archaeology Occasional Paper 20, paperbound, \$3.00)

METHODIST POINT, by W. A. Kenyon, Associate Curator in the Office of the Chief Archaeologist, records the excavation of an historic or late pre-historic Iroquois village. The village covered an area of roughly 12 acres in a Georgian Bay area soon to be developed as a provincial park. Examining potsherds from the site, Dr. Kenyon determined to avoid proliferating pottery types, and suggests a division into eight groupings. (METHODIST POINT, ROM Art and Archaeology Occasional Paper 22, paperbound, \$1.50)

C. R. Barnes, Research Associate, ROM Department of Invertebrate Palaeontology and member of the Department of Earth Sciences, University of Waterloo, and D. B. Sass and E. A. Monroe of State University of New York, Alfred, N.Y., have investigated the inner structure of three fossil conodonts, using the transmission and scanning electron-microscopes. Results indicate that internal structure may eventually prove a valuable criterion in taxonomic and phylogenetic conodont studies. (PRELIMINARY STUDIES OF THE ULTRASTRUCTURE OF SELECTED ORDOVICIAN CONODONTS, ROM Life Sciences Contribution 76, paperbound, \$2.00)

Prized Possessions from Private Homes, the catalogue for the 1968 exhibition of the same name, has received yet another design award. In Typomundus 20/2, a competition held in Germany and encompassing printed material produced in the last five years from all over the world, the International Centre of the Typographic Arts awarded the exhibition catalogue a Certificate of Merit.

In 1969 *Prized Possessions from Private Homes* earned an award for typographic excellence from The Type Directors' Club of New York, and a Certificate of Award from the Printing Industries of America, Graphics Arts Awards.

The catalogue was prepared by Jean Bacso, Assistant Curator of the ROM's European Department, and designed by Peter Dorn of the University of Toronto Press. Publication was generously assisted by a grant from the Canada Council.

The Royal Ontario Museum

MEMBERS OF THE BOARD

Mr. Richard G. Meech, Q.C.,
Chairman
Mr. Roy Cole
Mr. J. H. Crang
Mrs. D. C. Early
The Honourable Leslie M. Frost, Q.C.
Mrs. A. J. Grout
Mrs. W. B. Harris
Mr. John E. Langdon
Mr. Hugh Pryce-Jones
Mr. Clair Stewart
Mrs. Edgar Stone
Mr. Noah Torno
Mr. D. C. Webster
Col. D. Weldon
Professor M. St.A. Woodside

Ex-officio Members

Mr. O. D. Vaughan,
Acting Chairman, Board of
Governors, University of Toronto
Dr. Claude T. Bissell,
President, University of Toronto
Mr. Peter C. Swann,
Director

STAFF

Mr. Peter C. Swann, Director
Mr. J. H. Harvey, Secretary-Treasurer
Mr. V. Roberts, Financial Admin.
Mrs. H. R. Downie, Programme Sec'y
Mr. W. H. Bayley, Museology Course
Admin.

Art and Archaeology Departments

Office of Chief Archaeologist

Dr. A. D. Tushingham,
Chief Archaeologist
Dr. W. Kenyon, Assoc. Curator
Dr. D. M. Pendergast, Assoc. Curator
Mr. P. Storck, Assistant Curator
Mr. S. Dewdney, Research Associate
Dr. M. Gough, Research Associate
Mr. K. R. Macpherson, Research Assoc.
Dr. D. A. Nelson, Research Associate
Mr. J. R. Turnbull, Research Associate

Canadiana

Mr. D. B. Webster, Curator
Mrs. H. Ignatieff, Curatorial Asst.
Mrs. M. Allodi, Research Assistant
Miss J. Holmes, Research Assistant

Conservation

Mr. B. Leech, Assoc. Curator-in-Charge
Mrs. M. K. Allan, Curatorial Asst.
Mrs. E. A. Phillimore, Conservator
Prof. U. Franklin, Research Assoc.

Egyptian

Miss W. Needler, Curator Emeritus
Dr. N. B. Millet, Curator

Ethnology

Dr. E. S. Rogers, Curator
Dr. Helmuth Fuchs, Associate Curator
Dr. J. G. Taylor, Assistant Curator
Dr. C. A. Bishop, Research Assoc.
Dr. M. Black, Research Assoc.
Dr. W. P. Carstens, Research Assoc.
Dr. David Counts, Research Assoc.
Dr. Dorothy Counts, Research Assoc.
Dr. T. B. Hinton, Research Assoc.
Mrs. J. Vastokas, Research Assoc.

European

Mr. H. Hickl-Szabo, Curator
Mrs. J. Bacso, Assistant Curator
Mr. K. C. Keeble, Curatorial Asst.
Mr. L. Cselenyi, Curatorial Assistant

Far Eastern

Dr. Hsio-Yen Shih, Curator
Mrs. B. Stephen, Associate Curator
Miss D. Dohrenwend, Curatorial Asst.
Mr. Chin-Hsiung Hsu, Curatorial Asst.
Mr. Y. Mino, Curatorial Asst.
Miss B. Kingston, Librarian
Dr. D. Waterhouse, Research Assoc.

Greek and Roman

Mrs. N. Leipen, Curator
Miss A. Harle, Assistant Curator
Dr. J. W. Hayes, Assistant Curator
Prof. J. W. Graham, Research Assoc.
Dr. J. S. Wilkinson, Research Assoc.

Philately

Mr. D. Patrick, Hon. Curator

Textiles

Mr. H. B. Burnham, Curator
Mrs. K. B. Brett, Associate Curator
Dr. V. Gervers, Curatorial Assistant
Mr. J. Vollmer, Curatorial Asst.

West Asian

Dr. T. C. Young Jr., Curator
Dr. L. B. Golombek, Assistant Curator
Dr. L. Levine, Assistant Curator
Dr. J. S. Holladay, Research Assoc.
Dr. H. B. Schroeder, Research Assoc.

Science Departments

Office of Chief Biologist

Dr. L. S. Russell, Chief Biologist

Office of Chief Mineralogist

Dr. V. B. Meen, Chief Mineralogist
Mr. G. G. Waite, Research Associate
Mr. E. B. Tiffany, Research Associate

Botany

Mrs. L. Gad, Curatorial Asst.

Entomology and Invertebrate Zoology

Dr. G. B. Wiggins, Curator
Dr. D. Barr, Assistant Curator
Mr. T. Yamamoto, Curatorial Asst.
Mr. T. W. Beak, Research Associate
Dr. R. O. Brinkhurst, Research Assoc.
Dr. D. W. Crocker, Research Associate
Dr. F. P. Ide, Research Associate
Rev. J. C. E. Riotte, Research Assoc.

Geology

Dr. W. M. Tovell, Curator
Dr. J. H. McAndrews, Associate Curator
Dr. G. Norris, Research Assoc.
Prof. P. A. Peach, Research Associate

Ichthyology and Herpetology

Dr. W. B. Scott, Curator
Dr. E. J. Crossman, Curator
Dr. A. R. Emery, Research Associate
Dr. J. B. MacInnis, Research Assoc.
Mrs. I. Radforth, Research Associate

Invertebrate Palaeontology

Dr. D. H. Collins, Curator
Mr. J. Monteith, Curatorial Assistant
Dr. C. R. Barnes, Research Associate
Prof. M. Fritz, Research Associate
Dr. J. B. Waterhouse, Research Assoc.

Mammalogy

Dr. R. L. Peterson, Curator
Dr. J. R. Tamsitt, Associate Curator
Miss J. Eger, Curatorial Asst.
Mr. S. Brock, Research Associate
Mrs. N. Curry, Research Assoc.
Dr. M. Brock Fenton, Research Assoc.
Dr. Darío Valdivieso, Research Assoc.
Mr. J. G. Williams, Research Assoc.

McLaughlin Planetarium

Dr. H. C. King, Curator
Dr. T. R. Clarke, Assistant Curator
Mr. N. Green, Assistant Curator
Mr. R. Ballantyne, Curatorial Assistant
Mr. C. Papacostas, Production
Supervisor

Mineralogy

Dr. J. A. Mandarino, Curator
Dr. R. I. Gait, Assistant Curator
Dr. F. J. Wicks, Assistant Curator

Ornithology

Dr. J. C. Barlow, Curator
Dr. D. M. Power, Assistant Curator
Mr. J. A. Dick, Curatorial Assistant
Mrs. C. A. Goodwin, Curatorial Asst.
Dr. W. W. H. Gunn, Research Assoc.
Dr. J. Rising, Research Assoc.
Rev. R. C. Long, Research Associate
Dr. H. Savage, Research Associate

Vertebrate Palaeontology

Dr. A. G. Edmund, Curator
Dr. C. McGowan, Curatorial Asst.
Dr. C. S. Churcher, Research Assoc.
Dr. J. L. Kay, Research Assoc.
Dr. T. S. Parsons, Research Assoc.

Service Departments

Building Superintendent

Mr. A. Lawrence

Carpenters

Mr. D. Sinclair, Chief

Display Biology

Mr. T. M. Shortt, Chief

Display General

Mr. J. Anthony, Chief

Education

Miss N. E. Heakes, Supervisor
Miss E. Martin, Senior Lecturer
Miss E. Berlin, Supervisor, S.M.C.
Miss M. C. Cumming, Lecturer
Miss A. Chrysler, Lecturer
Miss E. Clark, Lecturer
Miss M. Fitz-Gibbon, Lecturer
Mr. B. H. Johnston, Lecturer
Mrs. P. Isetta, Lecturer
Mrs. H. Tracy, Lecturer
Mr. C. Westcott, Research Assoc.

Information Services

Mr. B. A. Easson, Information Officer
Miss B. Slopen, Information Assistant
Mrs. O. Koyama, Publications Editor
Mrs. B. Fischer, Special Projects

Library

Miss E. Taker, Head Librarian
Mrs. S. Johnston, Assistant Librarian
Mrs. V. Ritchie, Assistant Librarian

Photography

Mr. L. Warren, Chief

Preparators

Mr. I. Lindsay, Chief

Registration

Miss D. Hecken, Registrar
Miss M. Shook, Assistant
Mrs. F. Stanley, Customs

Sales Desk

Mrs. P. Downton, Supervisor

The Main Building, 100 Queen's Park, Toronto 181

Open weekdays 10 a.m. to 5 p.m., Sundays 1 p.m. to 9 p.m.
For public information call 928-3690.

**Sigmund Samuel Canadiana Building, 14 Queen's Park
Crescent West, Toronto 182**

Open weekdays 10 a.m. to 5 p.m., Sundays 1 p.m. to 5 p.m.
Telephone 928-3710

McLaughlin Planetarium, 100 Queen's Park, Toronto 181

Open weekdays 10 a.m., Sundays 1 p.m. Telephone
928-8550. Star Theatre shows: Tuesday through Friday at
2, 3:30 and 8 p.m.; Saturday, 2, 3:30, 5 and 8 p.m.;
Sunday, 2, 3:30, 5 and 7:30 p.m. Star Theatre closed
Mondays.


RÖM